

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A method performed by a controller ~~embedded in~~ that monitors and/or controls an apparatus ~~a device for retrieving data from a server,~~ the method comprising:

initiating communication with a server by sending a ~~command~~ message to the server, the message containing information that distinguishes ~~that identifies an instance of the apparatus from other apparatuses, the message comprising a hypertext transfer protocol (HTTP) message~~ device; and

receiving, from the server and in response to the message ~~command~~, data that is specific to the ~~instance of the device~~ apparatus; and

using the data to affect at least one of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the controller to send the data to the controller.

2. (Currently Amended) The method of claim 1, wherein the ~~command~~ message ~~includes~~ comprises an operational parameter for the apparatus ~~device~~ and the data comprises an

updated value for the operational parameter.

3. (Currently Amended) The method of claim 2, wherein the ~~command~~ message ~~includes~~ comprises plural operational parameters for the apparatus ~~device~~ and the data comprises updated values that differ from current values of the operational parameters.

4. (Cancelled)

5. (Currently Amended) The method of claim 1, wherein the data comprises a list of operations to be performed by the controller; and

~~the method further~~ using the data comprises:

 parsing the operations from the list; and

 performing the operations from the list.

6. (Currently Amended) The method of claim 1, wherein the data comprises a configuration file for the apparatus ~~device~~.

7. (Currently Amended) The method of claim 1, wherein the ~~command~~ message identifies the ~~instance of the~~ apparatus ~~device~~ by a ~~device~~ type and/or one or more of a serial number and a universal unique identifier.

8. (Currently Amended) The method of claim 1, wherein the ~~embedded~~ controller sends

~~the command~~ messages to the server periodically.

9. (Currently Amended) The method of claim 1, wherein the ~~server runs the~~ message comprises an HTTP Hypertext Transfer Protocol and the command that contains Extensible Markup Language code.

10. (Currently Amended) A method performed by a server for sending data over a network to a controller ~~embedded in that~~ monitors and/or controls an apparatus a device, the method comprising:

receiving a ~~command~~ message from the ~~embedded~~ controller, the message comprising a hypertext transfer protocol (HTTP) message;

identifying ~~an instance of the~~ apparatus device from information in the message, the information distinguishing the apparatus from other apparatuses ~~command~~;

retrieving data that is specific to the apparatus ~~instance of the device~~; and

sending the data from the server to the ~~embedded~~ controller, the data for affecting at least one of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the controller to send the data to the controller.

11. (Currently Amended) The method of claim 10, wherein:

the ~~command~~ message ~~includes~~ comprises a ~~device~~ type and/or one or more of a serial number and a universal unique identifier; and

the apparatus ~~instance of the device~~ is identified based on the ~~device~~ type and/or one or more of the serial number and the universal unique identifier.

12. (Currently Amended) The method of claim 11, further comprising:

parsing the ~~device~~ type and one or more of the serial number and universal unique identifier from the ~~command~~ message prior to identifying the apparatus ~~instance of the device~~.

13. (Currently Amended) The method of claim 10, wherein:

the ~~command~~ message ~~includes~~ comprises an operational parameter for the device; and
the data comprises an updated value of the operational parameter.

14. (Cancelled)

15. (Currently Amended) The method of claim 10, wherein the data comprises a list of operations to be performed by the apparatus ~~device~~.

16. (Currently Amended) The method of claim 10, wherein the data comprises a configuration file for the apparatus ~~device~~.

17. (Currently Amended) The method of claim 10, further comprising:

receiving the data specific to the apparatus ~~instance of the device~~; and

storing the data in memory;

wherein the data is retrieved from the memory.

18. (Currently Amended) The method of claim 17, wherein the data specific to the

apparatus ~~instance of the device~~ is received via a Web page generated by the server.

19. (Currently Amended) The method of claim 10, wherein the ~~server runs the~~ message

comprises an HTTP ~~Hypertext Transfer Protocol and the~~ command that contains Extensible Markup Language code.

20. (Currently Amended) A system comprising:

a controller ~~embedded in~~ that monitors and/or controls an apparatus ~~a device~~, the controller being capable of communicating over a computer network; and

a server that is capable of communicating over the computer network;

wherein (A) the ~~embedded~~ controller ~~sends a command~~ initiates communication with the server by sending a message to the server over the computer network, the message comprising a hypertext transfer protocol (HTTP) message, the message containing information that distinguishes the apparatus from other apparatuses; that identifies an instance of the device and, in response to the message, (B) the server (i) identifies the ~~instance of the device~~ apparatus based on the information in the message ~~command~~, (ii) retrieves data that is specific to the apparatus

~~instance of the device~~, and (iii) sends the data to the ~~embedded~~ controller over the computer network, the data for affecting at least one of: a configuration of the apparatus, an operation of the apparatus, and an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the controller to send the data to the controller.

21. (Currently Amended) The system of claim 20, wherein the server cannot initiate communication to the ~~embedded~~ controller because the controller is not ~~remotely~~[[-]] addressable from the computer network.

22. (Original) The system of claim 20, wherein the computer network comprises the Internet.

23. (Currently Amended) The system of claim 20, wherein the ~~server runs the~~ message comprises an HTTP ~~Hypertext Transfer Protocol and the~~ command that contains Extensible Markup Language code.

24. (Currently Amended) A computer program stored on one or more machine-readable media ~~a computer readable medium~~, the computer program being executable by a controller ~~embedded in~~ that monitors and/or controls an apparatus ~~a device to retrieve data from a server,~~ the computer program comprising instructions that cause the ~~embedded~~ controller to: initiate communication with a server by sending a message ~~send a command~~ to the

server, the message comprising a hypertext transfer protocol (HTTP) message, the message containing information that distinguishes the apparatus from other apparatuses that identifies an instance of the device; and

receive, from the server and in response to the message ~~command~~, data that is specific to the ~~instance of the device~~ apparatus; and

use the data to affect at least one of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the controller to send the data to the controller.

25. (Currently Amended) The computer program of claim 24, wherein the ~~command message includes~~ comprises an operational parameter for the apparatus ~~device~~ and the data comprises an updated value for the operational parameter.

26. (Currently Amended) The computer program of claim 25, wherein the ~~command message includes~~ comprises plural operational parameters for the apparatus ~~device~~ and the data comprises updated values that differ from current values of the operational parameters.

27. (Cancelled)

28. (Currently Amended) The computer program of claim 24, wherein the data comprises a list of operations to be performed by the controller; and

~~the computer program further comprises instructions that cause the embedded controller to wherein using the data comprises:~~

~~parse~~ parsing the operations from the list; and

~~perform~~ performing the operations from the list.

29. (Currently Amended) The computer program of claim 24, wherein the data comprises a configuration file for the apparatus ~~device~~.

30. (Currently Amended) The computer program of claim 24, wherein the message ~~command~~ identifies the apparatus ~~instance of the device~~ by a ~~device~~ type and/or one or more of a serial number and a universal unique identifier.

31. (Currently Amended) The computer program of claim 24, wherein the ~~embedded~~ controller sends ~~the command~~ messages to the server periodically.

32. (Currently Amended) The computer program of claim 24, wherein the ~~server runs~~ the message comprises an HTTP Hypertext Transfer Protocol and the command that contains Extensible Markup Language code.

33. (Currently Amended) A computer program stored on one or more machine-readable

media, the computer program being a computer-readable medium that is executable by a server
to send data over a network to a controller ~~embedded in~~ that monitors and/or controls an
apparatus a device, the computer program comprising instructions that cause the server to:

receive a ~~command~~ message from the ~~embedded~~ controller, the message comprising a
hypertext transfer protocol (HTTP) message;

identify ~~an instance of the~~ apparatus device from information in the message, the
information distinguishing the apparatus from other apparatuses ~~command~~;

retrieve data that is specific to the apparatus instance of the device; and

send the data to the ~~embedded~~ controller, the data for affecting at least one of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the
controller to send the data to the controller.

34. (Currently Amended) The computer program of claim 33, wherein:

the ~~command~~ message includes comprises a ~~device~~ type and/or one or more of a serial
number and a universal unique identifier; and

the ~~instance of the device~~ apparatus is identified based on the ~~device~~ type and/or one or
more of the serial number and the universal unique identifier.

35. (Currently Amended) The computer program of claim 34, further comprising

instructions that cause the server to:

parse the ~~device~~ type and one or more of the serial number and universal unique identifier from the message ~~command~~ prior to identifying the apparatus ~~instance of the device~~.

36. (Currently Amended) The computer program of claim 33, wherein:

the ~~command~~ message ~~includes~~ comprises an operational parameter for the apparatus ~~device~~; and

the data comprises an updated value of the operational parameter.

37. (Cancelled)

38. (Currently Amended) The computer program of claim 33, wherein the data comprises a list of operations to be performed by the apparatus ~~device~~.

39. (Currently Amended) The computer program of claim 33, wherein the data comprises a configuration file for the apparatus ~~device~~.

40. (Currently Amended) The computer program of claim 33, further comprising instructions that cause the server to:

receive the data specific to the apparatus ~~instance of the device~~; and

store the data in memory;

wherein the data is retrieved from the memory.

41. (Currently Amended) The computer program of claim 40, wherein the data specific to the apparatus instance of the device is received via a Web page generated by the server.

42. (Currently Amended) The computer program of claim 33, wherein the ~~server runs~~ the message comprises an HTTP Hypertext Transfer Protocol and the command that contains Extensible Markup Language code.

43. (Currently Amended) ~~An apparatus~~ A device to monitor and/or control an apparatus for retrieving data from a server, the device comprising:

~~a memory which stores executable instructions; and~~

a controller which executes ~~the~~ instructions to:

initiate communication with a server by sending a message send a command to the server, the message comprising a hypertext transfer protocol (HTTP) message, the message containing information that distinguishes the apparatus from other apparatuses that identifies an instance of the device; and

receive, from the server and in response to message command, data that is specific to the apparatus instance of the device; and

use the data to affect at least one of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the controller;

wherein, due to network architecture, the server cannot initiate communication to the controller to send the data to the controller.

44. (Currently Amended) The ~~device~~ apparatus of claim 43, wherein the message ~~command includes~~ comprises an operational parameter for the apparatus ~~device~~ and the data comprises an updated value for the operational parameter.

45. (Currently Amended) The ~~device~~ apparatus of claim 44, wherein the message ~~command includes~~ comprises plural operational parameters for the apparatus ~~device~~ and the data comprises updated values that differ from current values of the operational parameters.

46. (Cancelled)

47. (Currently Amended) The ~~device~~ apparatus of claim 43, wherein the data comprises a list of operations to be performed by the controller; and

~~the apparatus executes instructions to~~ wherein using the data comprises:

~~parse~~ parsing the operations from the list; and

~~perform~~ performing the operations from the list.

48. (Currently Amended) The ~~device~~ apparatus of claim 43, wherein the data comprises a configuration file for the apparatus ~~device~~.

49. (Currently Amended) The device ~~apparatus~~ of claim 43, wherein the message ~~command~~ identifies the apparatus ~~instance of the device~~ by a device type and/or one or more of a serial number and a universal unique identifier.

50. (Currently Amended) The device ~~apparatus~~ of claim 43, wherein the ~~embedded~~ controller sends ~~the command~~ messages to the server periodically.

51. (Currently Amended) The device ~~apparatus~~ of claim 43, wherein the message ~~comprises an HTTP server runs the Hypertext Transfer Protocol and the command that~~ contains Extensible Markup Language code.

52. (Currently Amended) ~~An apparatus~~ A device for sending data over a network to a remote controller ~~embedded in that monitors and/or controls an apparatus a device, the device~~ comprising:

~~a memory which stores executable instructions; and~~

a local controller which executes ~~the~~ instructions to:

receive a ~~command~~ message from the ~~embedded~~ remote controller, the message ~~comprising a hypertext transfer protocol (HTTP) message;~~

identify ~~an instance of the~~ apparatus ~~device~~ from information in the message, the information distinguishing the apparatus from other apparatuses ~~command;~~

retrieve data that is specific to the apparatus ~~instance of the device;~~ and

send the data to the ~~embedded~~ remote controller, the data for affecting at least one

of:

a configuration of the apparatus,

an operation of the apparatus, and

an operation of the remote controller;

wherein, due to network architecture, the local controller cannot initiate communication to the remote controller to send the data to the remote controller.

53. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein:

the ~~command message includes~~ comprises a ~~device~~ type and/or one or more of a serial number and a universal unique identifier; and

the ~~instance of the device~~ apparatus is identified based on the ~~device~~ type and/or one or more of the serial number and the universal unique identifier.

54. (Currently Amended) The ~~apparatus~~ device of claim 53, wherein the local controller ~~apparatus~~ executes instructions to:

parse the ~~device~~ type and one or more of the serial number and universal unique identifier from the command prior to identifying the apparatus ~~instance of the device~~.

55. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein:

the ~~command message includes~~ comprises an operational parameter for the apparatus ~~device~~; and

the data comprises an updated value of the operational parameter.

56. (Cancelled)

57. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein the data comprises a list of operations to be performed by the apparatus device.

58. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein the data comprises a configuration file for the apparatus device.

59. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein:

the ~~apparatus~~ local controller executes instructions to:

receive the data specific to the apparatus instance of the device; and

store the data in memory; and

~~the data is retrieved from the memory.~~

60. (Currently Amended) The ~~apparatus~~ device of claim 59, wherein the data specific to the ~~instance of the device~~ apparatus is received via a Web page generated by the device server.

61. (Currently Amended) The ~~apparatus~~ device of claim 52, wherein the message comprises an HTTP ~~apparatus runs the Hypertext Transfer Protocol and the command that~~ contains Extensible Markup Language code.

62. (New) The method of claim 1, wherein initiating communication is part of a polling process performed by the controller to obtain data from the server.

63. (New) The method of claim 1, wherein the server cannot initiate communication because the controller has a network address that the server cannot resolve.

64. (New) The method of claim 10, wherein the server cannot initiate communication because the controller has a network address that the server cannot resolve.

65. (New) The system of claim 20, wherein the controller initiating communication is part of a polling process performed by the controller to obtain data from the server.

66. (New) The system of claim 20, wherein the server cannot initiate communication because the controller has a network address that the server cannot resolve.

67. (New) The computer program of claim 24, wherein initiating communication is part of a polling process performed by the controller to obtain data from the server.

68. (New) The computer program of claim 24, wherein the server cannot initiate communication because the controller has a network address that the server cannot resolve.

69. (New) The computer program of claim 33, wherein the server cannot initiate

communication because the controller has a network address that the server cannot resolve.

70. (New) The device of claim 43, wherein initiating communication is part of a polling process performed by the controller to obtain data from the server.

71. (New) The device of claim 43, wherein the server cannot initiate communication because the controller has a network address that the server cannot resolve.

72. (New) The device of claim 52, wherein the local controller cannot initiate communication because the remote controller has a network address that the local controller cannot resolve.

73. (New) A method performed by a controller that monitors and/or controls an apparatus, the method comprising:

polling a server for messages, wherein polling comprises initiating communication with the server by sending a first message to the server, the first message identifying the apparatus;

receiving a reply message from the server in response to the first message, the reply message identifying a parameter associated with the apparatus; and

sending a second message to the server in response to the reply message, the second message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

74. (New) The method of claim 73, further comprising adjusting a time interval at which polling the server takes place.

75. (New) The method of claim 73, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

76. (New) The method of claim 73, wherein the reply message comprises a list of operational parameters, the parameter being on the list; and

wherein the method further comprises receiving, from the server and in response to the second message, an updated value of the parameter contained in the second message.

77. (New) The method of claim 73, further comprising:
receiving a second reply message from the server in response to the second message, the second reply message containing data relating to the parameter; and
using the data to affect at least one of:

- a configuration of the apparatus,
- an operation of the apparatus, and
- an operation of the controller.

78. (New) The method of claim 73, wherein the first message and the second message comprise Hypertext Transfer Protocol commands.

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79. (New) A method performed by a server for communicating with a controller that monitors and/or controls an apparatus, the method comprising:

receiving a first message from the controller, the first message for initiating communication with the server, the first message identifying the apparatus;

sending a reply message to the controller in response to the first message, the reply message identifying a parameter associated with the apparatus; and

receiving a second message from the controller in response to the reply message, the second message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

80. (New) The method of claim 79, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

81. (New) The method of claim 79, wherein the reply message comprises a list of operational parameters, the parameter being on the list; and

wherein the method further comprises sending, to the controller and in response to the second message, an updated value of the parameter contained in the second message.

82. (New) The method of claim 79, further comprising:

sending a second reply message to the controller in response to the second message, the

second reply message containing data relating to the parameter;

wherein the data can affect at least one of:

- a configuration of the apparatus,
- an operation of the apparatus, and
- an operation of the controller.

83. (New) The method of claim 79, wherein the first message and the second message comprise Hypertext Transfer Protocol commands.

84. (New) A computer program stored on one or more machine-readable media, the computer program comprising instructions that are executed by a controller that monitors and/or controls an apparatus, the instructions causing the controller to:

poll a server for messages, wherein polling comprises initiating communication with the server by sending a first message to the server, the first message identifying the apparatus;

receive a reply message from the server in response to the first message, the reply message identifying a parameter associated with the apparatus; and

send a second message to the server in response to the reply message, the second message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

85. (New) The computer program of claim 84, further comprising instructions that cause

the controller to adjust a time interval at which polling the server takes place.

86. (New) The computer program of claim 84, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

87. (New) The computer program of claim 84, wherein the reply message comprises a list of operational parameters, the parameter being on the list; and

wherein the computer program further comprises instructions that cause the controller to receive, from the server and in response to the second message, an updated value of the parameter contained in the second message.

88. (New) The computer program of claim 84, further comprising instructions that cause the controller to:

receive a second reply message from the server in response to the second message, the second reply message containing data relating to the parameter; and

use the data to affect at least one of:

- a configuration of the apparatus,
- an operation of the apparatus, and
- an operation of the controller.

89. (New) The computer program of claim 84, wherein the first message and the second message comprise Hypertext Transfer Protocol commands.

90. (New) A computer program stored on one or more machine-readable media, the computer program comprising instructions that are executable by a server to communicate with a controller that monitors and/or controls an apparatus, the computer program comprising instructions that cause the server to:

receive a first message from the controller, the first message for initiating communication with the server, the first message identifying the apparatus;

send a reply message to the controller in response to the first message, the reply message identifying a parameter associated with the apparatus; and

receive a second message from the controller in response to the reply message, the second message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

91. (New) The computer program of claim 90, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

92. (New) The computer program of claim 90, wherein the reply message comprises a list of operational parameter, the parameter being on the list; and

wherein the computer program further comprises instructions that cause the server to send, to the controller and in response to the second message, an updated value of the parameter contained in the second message.

93. (New) The computer program of claim 90, further comprising instructions that cause the server to:

send a second reply message to the controller in response to the second message, the second reply message containing data relating to the parameter;

wherein the data can affect at least one of:

a configuration of the apparatus,
an operation of the apparatus, and
an operation of the controller.

94. (New) The computer program of claim 90, wherein the first message and the second message comprise Hypertext Transfer Protocol commands.

95. (New) A device comprising:

a controller that monitors and/or controls an apparatus, the controller executing instructions to:

poll a server for messages, wherein polling comprises initiating communication with the server by sending a first message to the server, the first message identifying the apparatus;

receive a reply message from the server in response to the first message, the reply message identifying a parameter associated with the apparatus; and

send a second message to the server in response to the reply message, the second

message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

96. (New) The device of claim 95, wherein the controller executes instructions to adjust a time interval at which polling the server takes place.

97. (New) The device of claim 95, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

98. (New) The device of claim 95, wherein the reply message comprises a list of operational parameters, the parameter being on the list; and

wherein the controller executes instructions to receive, from the server and in response to the second message, an updated value of the parameter contained in the second message.

99. (New) The device of claim 95, wherein the controller executes instructions to:
receive a second reply message from the server in response to the second message, the second reply message containing data relating to the parameter; and

use the data to affect at least one of:

- a configuration of the apparatus,
- an operation of the apparatus, and
- an operation of the controller.

100. (New) The device of claim 95, wherein the first message and the second message comprise Hypertext Transfer Protocol commands.

101. (New) A system comprising:

a server that executes instructions to communicate with a controller that monitors and/or controls an apparatus, the server executing instructions to:

receive a first message from a controller, the first message for initiating communication with the server, the first message identifying the apparatus;

send a reply message to the controller in response to the first message, the reply message identifying a parameter associated with the apparatus; and

receive a second message from the controller in response to the reply message, the second message containing the parameter identified in the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.

102. (New) The system of claim 101, wherein the server cannot resolve a network address of the controller because the server and the controller are on different networks.

103. (New) The system of claim 101, wherein the reply message comprises a list of operational parameters, the parameter being on the list; and

wherein the server executes instructions to send, to the controller and in response to the

second message, an updated value of the parameter contained in the second message.

104. (New) The system of claim 101, wherein the server executes instructions to:
send a second reply message to the controller in response to the second message, the
second reply message containing data relating to the parameter;
wherein the data can affect at least one of:
a configuration of the apparatus,
an operation of the apparatus, and
an operation of the controller.

105. (New) The system of claim 101, wherein the first message and the second message
comprise Hypertext Transfer Protocol commands.

106. (New) A system comprising:
(A) a controller that monitors and/or controls an apparatus, the controller executing
instructions to:
poll a server for messages, wherein polling comprises initiating communication
with the server by sending a first message to the server, the first message identifying the
apparatus;
receive a reply message from the server in response to the first message, the reply
message identifying a parameter associated with the apparatus; and
send a second message to the server in response to the reply message, the second

message containing the parameter identified in the reply message; and

(B) the server, which executes instructions to communicate with the controller, the server executing instructions to:

receive the first message from a controller;

send the reply message to the controller in response to the first message; and

receive the second message from the controller in response to the reply message;

wherein the server cannot initiate communication to the controller because the server cannot resolve a network address of the controller.